

WELDING PROCEDURE SPECIFICATION

WPS - 10000-PVC/CPVC **REV. NO.:** 0 **DATE:** 3/21/2006 **APPLICABILITY**

WELDING PROCESS: Bonding and Bonding ASME: AWS: OTHER: ANSI B31.3 Ch. VII

SUPPORTING PQR: PQR 10000-C/PV

JOINT: This WPS shall be used in conjunction with the General Welding Standards (GWS) and Welding Fabrication Procedure (WFP) sections and criteria for joint details, repairs, NDE, inspection etc.

Weld Joint Type: Socket Class: Full contact - slip joint See GWS 1-06 and WFP's for joint details **Preparation:** Mechanical N/A **Root Opening: Backing:** N/A **Backgrind root:** N/A **Backing Mat.: GTAW Flux:** N/A **Bkgrd Method:** N/A **Backing Retainer:** N/A **FILLER METALS:** Class: N/A N/A and 0 0 0 A No: N/A SFA Class: N/A and N/A F No: N/A and N/A Size: 0 Insert: N/A Insert Desc.: N/A Weld Metal Thickness Ranges: Flux: Type: N/A Size: N/A 0 thru 0 **AWS Root Pass:** Filler Metal Note: None **AWS Balance:** thru **ASME Root Pass:** 0 thru 0 0.000 thru 0.000 **ASME Balance: BASE MATERIAL** P No. N/A Gr No. N/A to: P No. N/A Gr No. N/A Spec. ASTM D-1785 Grade: N/A Grade: N/A to: Spec. ASTM D-2241 0 ASME: 0.25 **Qualified Pipe Dia. Range:** ≥ **AWS: Qualified Thickness Range:** AWS: 0.000 0.000 **ASME:** 0.062 thru 1.000 thru **QUALIFIED POSITIONS:** AWS: N/A ASME: All Vert. Prog.: N/A Preheat Min. Temp.: 73°F **GAS: Shielding:** N/A N/A or 0 0 0 % 0 / 0 / **Interpass Max. Temp.:** 0 °F Gas Composition: / 0 % 73°F 0 0 to 0 **Preheat Maintenance:** Gas Flow Rate cfh: to 0 % PWHT: Time @ °F Temp. 0 **Backing Gas/Comp:** N/A Temp. Range: $0 \, ^{\circ} \mathbf{F}$ **Backing Gas Flow cfh:** 0 0 to $0 \, ^{\circ} \mathbf{F}$ N/A Trailing Gas/Comp: 0 % to

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DATE:

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Signatures on file at ENG

APPROVAL:

WPS NO: 10000-PVC/CPVC

WELDING CHARACTERISTICS:

Current: N/A and N/A Tungsten Type: N/A Transfer Mode: N/A

Ranges: Amps 0 to 0 Tungsten Dia.: 0 Pulsing Cycle: N/A to N/A

Volts 0 to 0 Background Current: N/A

Fuel Gas: N/A Flame: N/A Braze temp. °F 0 to 0

WELDING TECHNIQUE: For fabrication specific requirements sucg as fittup, cleaning, grinding, PWHT

and inspection criteria refer to Volume 2, Welding Fabrication Procedures

Technique: N/A Cleaning Method: Abrasive cloth/rags

Single Pass or Multi Pass: Stringer or Weave bead (S/W): N/A Oscillation:

GMAW Gun Angle °: 0 to 0 Forehand or Backhand for GMAW (F/B): N/A

No Pass S>1/2": N/A GMAW/FCAW Tube to work distance: N/A

Maximum K/J Heat Input: N/A Travel speed: N/A Gas Cup Size: N/A

PROCEDURE QUALIFIED FOR:

Charpy "V" Notch: N/A Nil-Ductil Transition Temperature: N/A Dynamic Tear: N/A

Comments: See PQR/PQT 10000-C/PVC for other control data used for this WPS. Dia. range for this WPS =

0.250 thru 12"

Weld Layer	Manual Process	Filler Metals	Size	Amp Range		Volt Range		Travel/ipm			Nozzle Angle			Other		
1	Bonding	N/A	0	0	to	0	0	to	0	0	to	0	0	to	0	
2	Bonding	N/A	0	0	to	0	0	to	0	0	to	0				
3	Bonding	N/A	0	0	to	0	0	to	0	0	to	0				
5	Bonding	N/A	0	0	to	0	0	to	0	0	to	0				
6																

REM. * Weld layers are representative only - actual number of passes and layer sequence may vary due to variations in joint design, thickness and fitup.

Use of LANL Welding Procedures and Welder Qualifications for non-LANL work shall be at the sole risk and responsibility of the Subcontractor, and the Subcontractor shall indemnify and save LANL and the Government harmless from any and all claims, demands, actions or causes of action, and for any expense or loss by reason of Subcontractor's and their employees posession and use of LANL procedures and qualifications.

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